REMARKS

Claims 1-32 are pending in the present application. In the above amendments, claims 29 - 32 have been canceled. Therefore, after entry of the above amendments, claims 1 – 28 will be pending in this application. Applicants believe that the present application is now in condition for allowance, which prompt and favorable action is respectfully requested.

35 U.S.C. § 101 Rejection

Claims 1-3 and 13-16 stand rejected under 35 U.S.C. § 101 as being directed to unpatentable subject matter. Applicants respectfully disagree and submit that the claims recite more than merely an abstract idea, i.e., these independent claims describe features of at least encrypting a first data frame based on a first unique code in a first communication device and transmitting said first transport frame and said second transport frame to a second communication device. Therefore these claims are directed towards a transformation of an object (at least encrypting and encapsulating data frames) as well as producing a useful, concrete and tangible result (transmitting said encyprted and encapsulated data frames). Therefore, Applicants respectfully submit that all claims comply with the requirements of 35 U.S.C. § 101.

35 U.S.C. 103(a) Rejection

Claims 1, 4, 7, 13-24 and 29-32 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Alden et al., U.S. Patent Application No. 6,101,543 ("Alden") in view of Kluttz et al., U.S. Patent No. 6,598,161 ("Kluttz"). The rejection asserts that Alden allegedly teaches each element of the claims except for encryption is based on sequential code encryption, which is allegedly taught by Kluttz. Applicants respectfully traverse the rejection.

Applicants' independent claims 1, 4, 7, 10, 13, 17, 20 and 25 are generally directed to providing security in a group communication network wherein the synchronization of encryption

and decryption of data frames comprises encrypting and encapsulating data frames using at least a first and second sequential codes, encapsulating said first encrypted data frame in a first transport frame, said first transport frame comprising a first portion and a second portion of said first sequential code … encrypting a second data frame based on a second unique code … said second unique code being derived from a second sequential code … encapsulating said second encrypted data frame in a second transport frame, said second transport frame comprising a first portion and a second portion of said second sequential code … the first portion of said first sequential code and said first portion of said second sequential code identify the same relative portions of said first and second sequential codes, and said second portion of said second sequential code represents a successive relative portion with respect to said second portion of said first sequential code.

Kluttz discloses "encrypting a document by dividing the document into at least a first portion having a first security level and a second portion having a second security level. The document is then encrypted utilizing at least two encryption keys so as to encrypt the first portion of the document with a first of the at least two encryption keys and so as to encrypt the second portion of the document with a second of the at least two encryption keys. Preferably, the document is sequentially encrypted utilizing at least two encryption keys so as to encrypt the first portion of the document with a first of the at least two encryption keys and so as to encrypt the first and the second portion of the document with a second of the at least two encryption keys." Abstract. Alden discloses a pseudo network adapter providing an interface for capturing packets from a local communications protocol stack for transmission on the virtual private network … includes a transmit path for processing data packets … transmit path includes an encryption engine for encrypting the data packets and an encapsulation engine for encapsulating the encrypted data packets into tunnel data frames." Abstract. However, none of the cited art teaches

or suggests, either individually or in combination, encapsulating said first encrypted data frame in a first transport frame, said first transport frame comprising a first portion and a second portion of said first sequential code ... encrypting a second data frame based on a second unique code ... said second unique code being derived from a second sequential code ... encapsulating said second encrypted data frame in a second transport frame, said second transport frame comprising a first portion and a second portion of said second sequential code ... wherein said first portion of said first sequential code and said first portion of said second sequential code identify the same relative portions of said first and second sequential codes, and said second portion of said second sequential code represents a successive relative portion with respect to said second portion of said first sequential code.

Kluttz describes the partitioning and encryption of a document having multiple security levels. See Fig. 3, Col. 5, lines 56-58. The partitioning and encryption functionality is further explained as "a user with top secret clearance would receive all three keys in FIG. 3. A user with secret clearance would receive only the secret 106 and confidential keys 108. A user with confidential clearance would receive only the confidential key 108. A user with no clearance would receive no keys in the encryption key portion 102 of the document ... Furthermore, while a single key set 102 is illustrated in FIG. 3, multiple sets of keys may be incorporated in document 100. Such sets could be paired with the user identification of the intended recipient." Col. 6, lines 38-49. In other words, different keys are used for different partitions of the document without any part of any of the keys being used in combination with each other. That is, "wherein said first portion of said first sequential code and said first portion of said second sequential code identify the same relative portions of said first and second sequential codes, and said second portion of said second sequential code represents a successive relative portion with respect to said second portion of said first sequential code" is simply not disclosed. In addition, it could

reasonably be argued that Kluttz also does not disclose that the encapsulating said first encrypted data frame in a first transport frame, said first transport frame comprising a first portion and a second portion of said first sequential code is not disclosed. Nowhere in Kluttz does it discuss the encapsulation of the portions of sequential code with the encypted data frames. Therefore Kluttz does not disclose these particular elements of the independent claims.

Alden only discloses well known authentication and encryption techniques, for instance in Fig. 15 an encryption engine 265 is shown and then further described functionally in Fig. 17 as "At step 334 the pseudo network adapter encrypts the message using an encryption engine such that only the receiver is capable of decrypting and reading the message." Col. 17, lines 3-5. There is no detailed discussion or description as to other techniques used for encryption. Therefore, Alden also does not teach or disclose encapsulating said first encrypted data frame in a first transport frame, said first transport frame comprising a first portion and a second portion of said first sequential code … encrypting a second data frame based on a second unique code … said second unique code being derived from a second sequential code … encapsulating said second encrypted data frame in a second transport frame, said second transport frame comprising a first portion and a second portion of said second sequential code … wherein said first portion of said first sequential code and said first portion of said second sequential code identify the same relative portions of said first and second sequential codes, and said second portion of said second sequential code represents a successive relative portion with respect to said second portion of said first sequential code, therefore not making up for the deficiency in Kluttz.

It is therefore respectfully submitted that neither of the purported admitted Prior Art, either in combination or individually, prevent the allowability of the present claims.

Dependent Claims

Claims 2-3, 5-6, 8-9, 11-12, 14-16, 18-19, 21-24 and 26-28 depend directly or ultimately from, and include all the subject matter of, claims 1, 4, 7, 10, 13, 17, 20 and 25, and should be allowed for at least the same reasons presented above regarding the independent claims as well as the additionally recited features found in the claims. Because independent claims 1, 4, 7, 10, 13, 17, 20 and 25 are believed to be allowable, Applicant has not argued or otherwise relied on independent patentability of dependent claims, but reserves the right to do so in this or any subsequent proceeding.

CONCLUSION

In light of the amendments contained herein, Applicants submit that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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